PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Hiroaki YASUDA

Appln. No.: 10/718,643 Group Art Unit: 2884

Confirmation No.: 1194 Examiner: Hannaher, Constantine

Filed: November 24, 2003 Docket No: Q78532

For: RADIATION IMAGE READ-OUT APPARATUS AND RADIATION IMAGE CONVERTOR PANEL

SUGGESTION FOR INTERFERENCE UNDER 37 C.F.R. §41.202(a)

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Sir:

In response to the Office Action dated May 8, 2007, pursuant to 37 C.F.R. §41.202(a), Applicant suggests an interference with granted U.S. Patent No. 7,071,484, filed March 8, 2004, and issued on July 4, 2006, naming as inventors Martin Lind, Ralph Thoma, Georg Reiser and Christian Schulz.

In the Office Action dated May 8, 2007, the Examiner has rejected claims 9-20 of the present application as being obvious over U.S. Pat. Pub. No. 2003/0042445 to Mitchell *et al.* in view of U.S. Pat. No. 6,583,434 to Struye *et al.* and U.S. Pat. No. 5,905,014 to Van de Bergh.

Regarding this rejection, Applicant submits that the amended claims of the present application recite the same subject matter as granted claims 19-30 of U.S. Pat. No. 7,071,484 ("the '484 patent"). Applicant respectfully submits that since claims 9-20 of the present application recite the same subject matter as granted claims 19-30 of the '484 patent, claims 9-20 of the present application are patentable.

Since two patents cannot issue to the same claims, Applicant suggests that an interference be declared between the present application and U.S. Patent No. 7,071,484, filed March 8, 2004.

TABLE OF CONTENTS

I. Statement Pursuant to 37 C.F.R. §41.202(a)(1)

Pursuant to 37 C.F.R. §41.202(a)(1), Applicant identifies the application with which the Applicant seeks an interference as follows:

U.S. Patent No. 7,071,484, filed March 8, 2004, naming as inventors Martin Lind, Ralph Thoma, Georg Reiser and Christian Schulz.

II. Statement Pursuant to 37 C.F.R. §41.202(a)(2)

Pursuant to 37 C.F.R. §41.202(a)(2), Applicant identifies all claims that are believed to interfere, proposes a count, and shows how the claims correspond to the proposed count, as follows.

A. Interfering Claims of the Parties

Applicant identifies all claims of the parties that should be designated as corresponding to the count, as follows:

Applicant's Claims: 9-20 (all pending claims)

Lind *et al.*, U.S. Pat. No. 7,071,484 B2: Claims 19-30.

B. Proposed Count 1

Applicant proposes the following Count 1 for the interference:

Claim 9 of Yasuda Serial No. 10/718,643

or

Claim 19 of Lind *et al.*, U.S. Pat. No. 7,071,484 B2

These claims are compared in the following table:

Proposed Count 1	
Yasuda Claim 9	**Lind *et al.* Claim 19**
A device for acquiring latent image information contained in a phosphor layer, said device comprising:	A device for acquiring latent image information contained in a phosphor layer, said device comprising:
a light source for irradiating the phosphor layer with excitation light that is suitable for exciting emission light in the phosphor layer,	a light source for irradiating the phosphor layer with excitation light that is suitable for exciting emission light in the phosphor layer,
said emission light having a first wavelength range and	said emission light having a first wavelength range (W1) and
said excitation light having a second wavelength range;	said excitation light having a second wavelength range (W2);
a detector for detecting the emission light that has been excited in the phosphor layer; and	a detector for detecting the emission light that has been excited in the phosphor layer; and
a filter device, arranged between the phosphor layer and the detector,	a filter device, arranged between [at least one of] the phosphor layer and the detector, [and the phosphor layer and the light source,][1]
the improvement wherein: the filter device comprises at least two absorption filter elements which are joined to one another,	the improvement wherein: the filter device comprises at least two absorption filter elements which are joined to one another,
wherein the filter device is substantially transparent in a first wavelength range of the emission light and	wherein the filter device is substantially transparent in a first wavelength range (W1) of the emission light and
is substantially non-transparent in a second wavelength range of the excitation light, and	is substantially non-transparent in a second wavelength range (W2) of the excitation light, and
wherein the filter device is substantially non-	wherein the filter device is substantially non-

[1] Lind *et al.* Claim 19 recites alternate placement of the filter, i.e., between the light source and the phosphor layer, or between the phosphor layer and the detector. Applicant suggests only the alternative of placing the filter between the phosphor layer and the detector in the count.

transparent in at least a third wavelength range that is located at longer wavelengths than the second wavelength range of the excitation light.	transparent in at least a third wavelength range (W3) that is located at longer wavelengths than the second wavelength range (W2) of the excitation light.

As shown in the table, Yasuda Claim 9 and Lind et al. Claim 19 define the same structure.

Using the two-way analysis required by 37 C.F.R. §41.202(a)(3), which defines interfering subject matter, "[a]n interference exists if the subject matter of a claim of one party would, if prior art, have anticipated or rendered obvious the subject matter of a claim of the opposing party and vice versa." A two-way test is thus applied to determine whether interfering subject matter exists. Applicant submits that Yasuda Claim 9 and Lind *et al.* Claim 19 define interfering subject matter.

More specifically, Yasuda Claim 9 anticipates Lind *et al.* Claim 19, and Lind *et al.* Claim 19 anticipates Yasuda Claim 9 as both claims recite the same subject matter on their faces.

Applicant submits that the two-way test for interfering subject matter is clearly satisfied, because Yasuda Claim 9 anticipates Lind *et al.* Claim 19, and vice versa.

C. Corresponding Claims of the Parties

Applicant shows how the claims correspond to the count, as follows. Under 37 C.F.R. §41.207(b)(2), a claim corresponds to a count if the subject matter of the count, treated as prior art to the claim, would have anticipated or rendered obvious the subject matter of the claim. Claim correspondence is thus determined using a one-way test, and the parties' claims are properly designated as corresponding to a count, even though they may not each interfere with a claim of an opponent.

The claims of the parties which should be designated as corresponding to the count are as follows, with reference to Yasuda's claims as amended on September 6, 2007, and Lind *et al.*'s claims as allowed.

Claims Corresponding to Count 1:

Yasuda: Claims 9-20 (all pending claims)

Lind *et al.*: Claims 19-30.

Applicant submits that each of the parties' claims is anticipated by or is obvious in view of the proposed count, assuming that the count is prior art, as shown in the following tables.

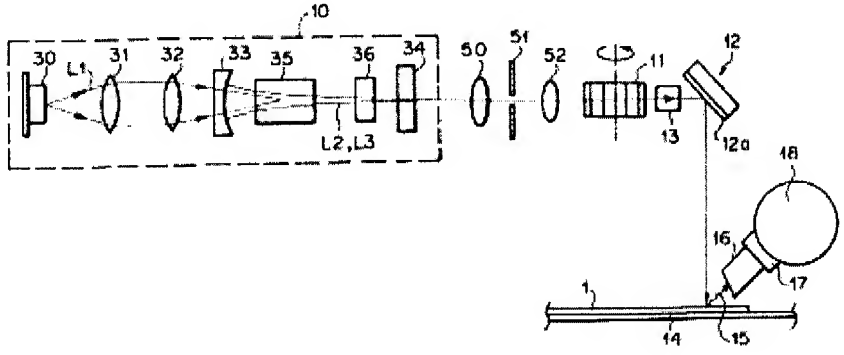
Applicant does not admit that any of his claims are anticipated by or *prima facie* obvious from anything other than the count proposed herein and, even then, only for the limited purpose of determining designation of the parties' claims. Thus, the statements made herein should not be construed as an admission that any of Yasuda's claimed subject matter lacks novelty or is obvious.

Applicant submits that the following references, when combined with the proposed count as indicated below, render the respective claims obvious.

Ishikawa et al., U.S. Patent No. 5,821,552

Ishikawa is directed to a radiation image read apparatus in which a stimulable phosphor sheet on which radiation image information has been stored is scanned with stimulating rays from a solid state laser beam light source, and light emitted by the stimulable phosphor sheet is photoelectrically detected. Column 1, lines 6-17.

F I G.1

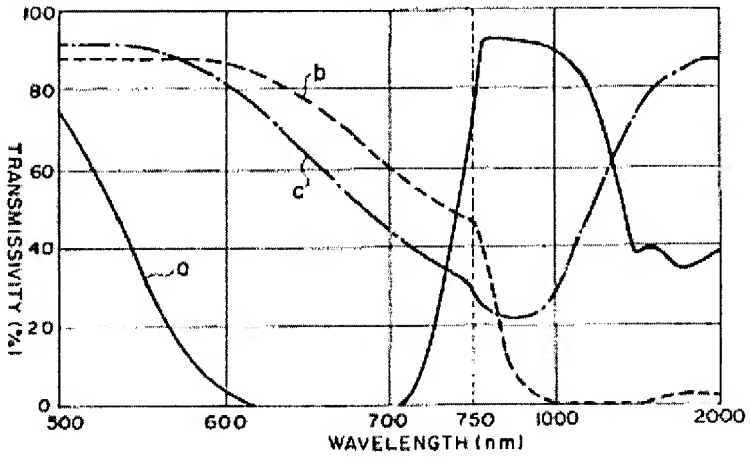


Ishikawa discloses a light source 10 for irradiating a phosphor layer 1 with excitation light suitable for exciting emission in the phosphor layer, where the excitation light has a wavelength around 657 nm and the emission light has a wavelength around 400 nm. A filter device 17 disposed between the detector 18 in the phosphor layer 1 includes two associated

filters. Column 5, lines 1-16. The filter device 17 is substantially transparent in the first wavelength range around 400 nm of the emission light and substantially non-transparent in the second wavelength range around 657 nm of the excitation light. Column 4, lines 64-67. The filter device 17 is also substantially non-transparent at least the third wavelength range around 1313 nm. Column 4, line 64-column 5, line 16. See also Fig. 5.

As illustrated in figure 5, curve b demonstrates that the first filter element is clearly non-transparent in the second wavelength range around and including 657 nm. Curve a demonstrates that the second filter is clearly non-transparent in the third wavelength range around 1313 nm, or about 900nm and above. Also, the range of suppression for curve a borders the range of absorption and for curve b, or is proximate thereto.

FIG.5



Gebele et al., U.S. Pat. No. 6,369,402

Gebele discloses the use of reflective layers in combination with absorption filters for reflecting certain wavelengths. Column 2, lines 26-60. Several reflective layers arranged in the optical path between the radiation source the receiver may be designed for different wavelengths to be reflected. Column 2, lines 35-40. In addition to a reflective layer, a filter may be arranged in the optical path for absorbing the excitation radiation. Column 2, lines 56-60. Gebele also describes the benefits of using thinner filter arrangements such as fewer scattering effects. Col. 2, line 63 to col. 4, line 2.

D. Claims Corresponding to Proposed Count 1

1. Yasuda Claim 9 and Lind et al. Claim 19

Because the structure recited in Yasuda Claim 9 and Lind *et al.* Claim 19 are incorporated in proposed Count 1, these claims are necessarily anticipated by proposed Count 1.

Proposed Count 1	
Yasuda Claim 9	**Lind *et al.* Claim 19**
A device for acquiring latent image information contained in a phosphor layer, said device comprising:	A device for acquiring latent image information contained in a phosphor layer, said device comprising:
a light source for irradiating the phosphor layer with excitation light that is suitable for exciting emission light in the phosphor layer,	a light source for irradiating the phosphor layer with excitation light that is suitable for exciting emission light in the phosphor layer,
said emission light having a first wavelength range and	said emission light having a first wavelength range (W1) and
said excitation light having a second wavelength range;	said excitation light having a second wavelength range (W2);
a detector for detecting the emission light that has been excited in the phosphor layer; and	a detector for detecting the emission light that has been excited in the phosphor layer; and
a filter device, arranged between the phosphor layer and the detector,	a filter device, arranged between [at least one of] the phosphor layer and the detector, [and the phosphor layer and the light source,][2]
the improvement wherein: the filter device comprises at least two absorption filter elements which are joined to one another,	the improvement wherein: the filter device comprises at least two absorption filter elements which are joined to one another,

[2] Lind *et al.* Claim 19 recites alternate placement of the filter, i.e., between the light source and the phosphor layer, or between the phosphor layer and the detector. Applicant suggests only the alternative of placing the filter between the phosphor layer and the detector in the count.

wherein the filter device is substantially transparent in a first wavelength range of the emission light and	wherein the filter device is substantially transparent in a first wavelength range (W1) of the emission light and
is substantially non-transparent in a second wavelength range of the excitation light, and	is substantially non-transparent in a second wavelength range (W2) of the excitation light, and
wherein the filter device is substantially non-transparent in at least a third wavelength range that is located at longer wavelengths than the second wavelength range of the excitation light.	wherein the filter device is substantially non-transparent in at least a third wavelength range (W3) that is located at longer wavelengths than the second wavelength range (W2) of the excitation light.

2. Yasuda Claim 10

Yasuda Claim 10 is anticipated by Count 1 (Yasuda Claim 9), when in the Count a first filter elements is substantially transparent in the first wavelength range and is substantially nontransparent in the second wavelength range, and a second filter element is substantially transparent in the first wavelength range and is substantially non-transparent in the third wavelength range located at longer wavelengths than the second wavelength range. Yasuda Claim 10 is therefore properly designated as corresponding to Count 1.

3. Lind et al. Claim 20

Lind *et al.* Claim 20 is anticipated by Count 1 (Lind *et al.* Claim 19), when in the Count a first filter elements is substantially transparent in the first wavelength range and is substantially nontransparent in the second wavelength range, and a second filter element is substantially transparent in the first wavelength range and is substantially non-transparent in the third wavelength range located at longer wavelengths than the second wavelength range. Lind *et al.* Claim 20 is therefore properly designated as corresponding to Count 1.

4. Yasuda Claim 11

Yasuda Claim 11 is obvious over Count 1 (Yasuda Claim 9), when in the Count one of the filter elements includes a second reflection layer, as disclosed by Gebele (U.S. 6,369,402), that is substantially non-transparent for light in a fifth wavelength range located at longer wavelengths than the second wavelength range and which partially overlaps with the third wavelength range. Gebele teaches the use of a reflective layer in cooperation with a filter (column 2, line 63-column 3, line 2).

5. Lind et al. Claim 21

Lind *et al.* Claim 21 is obvious over Count 1 (Lind *et al.* Claim 19), when in the Count one of the filter elements includes a second reflection layer, as disclosed by Gebele (U.S. 6,369,402), that is substantially non-transparent for light in a fifth wavelength range located at longer wavelengths than the second wavelength range and which partially overlaps with the third wavelength range. Gebele teaches the use of a reflective layer in cooperation with a filter (column 2, line 63-column 3, line 2).

6. Yasuda Claim 12

Yasuda Claim 12 is obvious over Count 1 (Yasuda Claim 9), when in the Count one of the filter elements includes a first reflection layer, as disclosed by Gebele (U.S. 6,369,402) and Ishikawa (U.S. 5,821,552), that is substantially non-transparent for light in a fourth wavelength range located at longer wavelengths than the second wavelength range, and wherein the fifth wavelength range partially overlaps with the fourth wavelength range. Gebele discloses a reflective layer and an absorption filter in the optical path. Column 2, lines 57-60. Figure 5 of Ishikawa illustrates a filter characteristic having a fourth substantially nontransparent in a wavelength range W4 located at a longer wavelength range than a second wavelength range W2.

7. Lind et al. Claim 22

Lind *et al.* Claim 22 is obvious over Count 1 (Lind *et al.* Claim 9), when in the Count one of the filter elements includes a first reflection layer, as disclosed by Gebele (U.S. 6,369,402)

and Ishikawa (U.S. 5,821,552), that is substantially non-transparent for light in a fourth wavelength range located at longer wavelengths than the second wavelength range, and wherein the fifth wavelength range partially overlaps with the fourth wavelength range. Gebele discloses a reflective layer and an absorption filter in the optical path. Column 2, lines 57-60. Figure 5 of Ishikawa illustrates a filter characteristic having a fourth substantially nontransparent in a wavelength range W4 located at a longer wavelength range than a second wavelength range W2.

8. Yasuda Claim 13

Yasuda Claim 13 is obvious over Count 1 (Yasuda Claim 9), when in the Count one of the filter elements includes a first reflection layer, as disclosed by Gebele (U.S. 6,369,402) and Ishikawa (U.S. 5,821,552), that is substantially non-transparent for light in a fourth wavelength range located at longer wavelengths than the second wavelength range. Gebele discloses a reflective layer and an absorption filter in the optical path. Column 2, lines 57-60. Figure 5 of Ishikawa illustrates a filter characteristic having a fourth substantially nontransparent in a wavelength range W4 located at a longer wavelength range than a second wavelength range W2.

9. Lind et al. Claim 23

Lind *et al.* Claim 23 is obvious over Count 1 (Lind *et al.* Claim 9), when in the Count one of the filter elements includes a first reflection layer, as disclosed by Gebele (U.S. 6,369,402) and Ishikawa (U.S. 5,821,552), that is substantially non-transparent for light in a fourth wavelength range located at longer wavelengths than the second wavelength range. Gebele discloses a reflective layer and an absorption filter in the optical path. Column 2, lines 57-60. Figure 5 of Ishikawa illustrates a filter characteristic having a fourth substantially nontransparent in a wavelength range W4 located at a longer wavelength range than a second wavelength range W2.

10. Yasuda Claim 14

Yasuda Claim 14 is obvious over Count 1 (Yasuda Claim 9), when in the Count the fourth wavelength range partially overlaps with the second wavelength range, as disclosed by

Ishikawa (U.S. 5,821,552). Fig. 5 of Ishikawa and the designated wavelength range of about 700-800 nm would overlap the second wavelength range. To the extent that the overlap feature of the claim may not be expressly described by Ishikawa it is obvious to one skilled in the art.

11. Lind et al. Claim 24

Lind *et al.* Claim 24 is obvious over Count 1 (Lind *et al.* Claim 9), when in the Count when in the Count the fourth wavelength range partially overlaps with the second wavelength range, as disclosed by Ishikawa (U.S. 5,821,552). Fig. 5 of Ishikawa and the designated wavelength range of about 700-800 nm would overlap the second wavelength range. To the extent that the overlap feature of the claim may not be expressly described by Ishikawa it is obvious to one skilled in the art.

12. Yasuda Claim 15

Yasuda Claim 15 is anticipated by Count 1 (Yasuda Claim 9), when in the Count the third wavelength range overlaps with the second wavelength range.

13. Lind et al. Claim 25

Lind *et al.* Claim 25 is anticipated by Count 1 (Lind *et al.* Claim 9), when in the Count the third wavelength range overlaps with the second wavelength range.

14. Yasuda Claim 16

Yasuda Claim 16 is anticipated by Count 1 (Yasuda Claim 9), when in the Count the filter device at wavelengths in the first wavelength range exhibits a degree of transmission that is greater than 0.1.

15. Lind et al. Claim 26

Lind *et al.* Claim 26 is anticipated by Count 1 (Lind *et al.* Claim 9), when in the Count the filter device at wavelengths in the first wavelength range exhibits a degree of transmission that is greater than 0.1.

16. Yasuda Claim 17

Yasuda Claim 17 is anticipated by Count 1 (Yasuda Claim 9), when in the Count the filter device at wavelengths in at least one of the second wavelength range and the third wavelength range exhibits a degree of transmission that is less than 10^{-3}.

17. Lind et al. Claim 27

Lind *et al.* Claim 27 is anticipated by Count 1 (Lind *et al.* Claim 9), when in the Count the filter device at wavelengths in at least one of the second wavelength range and the third wavelength range exhibits a degree of transmission that is less than 10^{-3}.

18. Yasuda Claim 18

Yasuda Claim 18 is anticipated by Count 1 (Yasuda Claim 9), when in the Count the third wavelength range borders on the second wavelength range.

19. Lind et al. Claim 28

Lind *et al.* Claim 28 is anticipated by Count 1 (Lind *et al.* Claim 9), when in the Count the third wavelength range borders on the second wavelength range.

20. Yasuda Claim 19

Yasuda Claim 19 is anticipated by Count 1 (Yasuda Claim 9), when in the Count the filter device at wavelengths in the first wavelength range exhibits a degree of transmission that is greater than 0.7.

21. Lind et al. Claim 29

Lind *et al.* Claim 29 is anticipated by Count 1 (Lind *et al.* Claim 9), when in the Count the filter device at wavelengths in the first wavelength range exhibits a degree of transmission that is greater than 0.7.

22. Yasuda Claim 20

Yasuda Claim 20 is obvious over Count 1 (Yasuda Claim 9), when in the Count the filter device at wavelengths in at least one of the second wavelength range and the third wavelength range exhibits a degree of transmission that is less than 10^{-4}, as disclosed by Ishikawa (U.S. 5,821,552). To the extent that Ishikawa may not expressly teach the transmissivity as claimed, the passage of light in a range of stimulated emissions is a results-effective variable in the art of stimulable phosphor reading. Therefore, it would have been obvious to vary the filters of Ishikawa to have a transmission characteristic as described by claim 30.

23. Lind et al. Claim 30

Lind *et al.* Claim 30 is obvious over Count 1 (Lind *et al.* Claim 9), when in the Count the filter device at wavelengths in at least one of the second wavelength range and the third wavelength range exhibits a degree of transmission that is less than 10^{-4}, as disclosed by Ishikawa (U.S. 5,821,552). To the extent that Ishikawa may not expressly teach the transmissivity as claimed, the passage of light in a range of stimulated emissions is a results-effective variable in the art of stimulable phosphor reading. Therefore, it would have been obvious to vary the filters of Ishikawa to have a transmission characteristic as described by claim 30.

III. Statement Pursuant to 37 C.F.R. §41.202(a)(3)

Pursuant to 37 C.F.R. §41.202(a)(3), Applicant provides the following claim chart comparing at least one claim of each party corresponding to each count, and showing why the claims interfere within the meaning of §41.203(a). Under §41.202(a)(3), which defines interfering subject matter, "[a]n interference exists if the subject matter of a claim of one party would, if prior art, have anticipated or rendered obvious the subject matter of a claim of the opposing party and vice versa." A two-way test is thus applied to determine whether interfering

subject matter exists. For an interference to be declared, it is only necessary that a single claim of one party must interfere with a single claim of the other party.

Yasuda Claim 9 and Lind *et al.* Claim 19, which are incorporated in proposed Count 1, are discussed above, and define interfering subject matter because each claim anticipates the other.

Applicant submits that the two-way test for interfering subject matter is clearly satisfied, because Yasuda Claim 9 anticipates Lind *et al.* Claim 19, and *vice versa*.

Proposed Count 1	
A device for acquiring latent image information contained in a phosphor layer, said device comprising:	A device for acquiring latent image information contained in a phosphor layer, said device comprising:
a light source for irradiating the phosphor layer with excitation light that is suitable for exciting emission light in the phosphor layer,	a light source for irradiating the phosphor layer with excitation light that is suitable for exciting emission light in the phosphor layer,
said emission light having a first wavelength range and	said emission light having a first wavelength range (W1) and
said excitation light having a second wavelength range;	said excitation light having a second wavelength range (W2);
a detector for detecting the emission light that has been excited in the phosphor layer; and	a detector for detecting the emission light that has been excited in the phosphor layer; and
a filter device, arranged between the phosphor layer and the detector,	a filter device, arranged between [at least one of] the phosphor layer and the detector, [and the phosphor layer and the light source,][3]
the improvement wherein: the filter device comprises at least two absorption filter	the improvement wherein: the filter device comprises at least two absorption filter

[3] Lind *et al.* Claim 19 recites alternate placement of the filter, i.e., between the light source and the phosphor layer, or between the phosphor layer and the detector. Applicant suggests only the alternative of placing the filter between the phosphor layer and the detector in the count.

elements which are joined to one another, wherein the filter device is substantially transparent in a first wavelength range of the emission light and is substantially non-transparent in a second wavelength range of the excitation light, and wherein the filter device is substantially non-transparent in at least a third wavelength range that is located at longer wavelengths than the second wavelength range of the excitation light.	elements which are joined to one another, wherein the filter device is substantially transparent in a first wavelength range (W1) of the emission light and is substantially non-transparent in a second wavelength range (W2) of the excitation light, and wherein the filter device is substantially non-transparent in at least a third wavelength range (W3) that is located at longer wavelengths than the second wavelength range (W2) of the excitation light.

As shown in the table, Yasuda Claim 9 and Lind et al. Claim 19 define the same structure.

Using the two-way analysis required by 37 C.F.R. §41.202(a)(3), which defines interfering subject matter, "[a]n interference exists if the subject matter of a claim of one party would, if prior art, have anticipated or rendered obvious the subject matter of a claim of the opposing party and vice versa." A two-way test is thus applied to determine whether interfering subject matter exists. Applicant submits that Yasuda Claim 9 and Lind *et al.* Claim 19 define interfering subject matter.

More specifically, Yasuda Claim 9 anticipates Lind *et al.* Claim 19, and Lind *et al.* Claim 19 anticipates Yasuda Claim 9 as both claims recite the same subject matter on their faces.

Applicant submits that the two-way test for interfering subject matter is clearly satisfied, because Yasuda Claim 9 anticipates Lind *et al.* Claim 19, and vice versa.

IV. Statement Pursuant to 37 C.F.R. §41.202(a)(4)

Applicant will prevail on priority at least because an embodiment which anticipates the subject matter of proposed Count 1, was constructively reduced to practice on November 25,

2002, as evidenced by the filing of Application No. 340972/2002 from which the present application claims priority, in the Japanese Patent Office on that date, which is prior to Lind *et al.*'s foreign priority filing date of March 28, 2003.

V. Statement Pursuant to 37 C.F.R. §41.202(a)(5)

Pursuant to 37 C.F.R. §41.202(a)(5), the Applicant provides written description support for each limitation of Applicant's involved Claims 9-20 as shown in the following table.

Applicant's Claim 19	**Disclosure of Ser. No. 10/718,643**[4]
19. A device for acquiring latent image information contained in a phosphor layer, said device comprising:	"[T]he primary object of the present invention is to provide a radiation image read-out apparatus and a radiation image converter panel ..." *Yasuda*, ¶ [0015].
a light source for irradiating the phosphor layer with excitation light that is suitable for exciting emission light in the phosphor layer,	"[W]hen the phosphors which have been exposed to the radiation are exposed to stimulating light such as visible light, light having a wavelength shorter than the stimulating light is emitted from the phosphors in proportion to the stored energy of the radiation." *Yasuda*, ¶ [0004].
said emission light having a first wavelength range and	
said excitation light having a second wavelength range;	"[A] stimulating light beam projecting system 20 which projects onto a radiation image converter panel 10 a line-like stimulating light beam Le (660 nm in wavelength) ..." *Yasuda*, ¶ [0039].
a detector for detecting the emission light that has been excited in the phosphor layer; and	"[A] photodetector which receives the stimulated emission ..." *Yasuda*, ¶ [0016].
a filter device, arranged between the phosphor layer and the detector,	"[A] stimulating light cut filter which is disposed in the optical path of the stimulated

[4] Paragraph numbers reference paragraphs in Pre-Grant Publication No. 2004/0099827 A1 corresponding to Application Ser. No. 10/718,643.

	emission between the photodetector and the radiation image convertor panel to transmit the stimulated emission and to cut the stimulating light ..." *Yasuda*, ¶ [0016].
the improvement wherein: the filter device comprises at least two absorption filter elements which are joined to one another,	"[T]he longer wavelength light cut filter may comprise a flat plate which absorbs light components longer in wavelength than the stimulating light and is coated with a multilayer film absorbing light components longer in wavelength than the stimulating light and may be integrated with the stimulating light cut filter." *Yasuda*, ¶ [0054].
wherein the filter device is substantially transparent in a first wavelength range of the emission light and	"a longer wavelength light cut filter which transmits the stimulated emission and attenuates the intensity of light components longer in wavelength than the stimulating light is provided in the optical path of the stimulated emission between the photodetector and the radiation image convertor panel." *Yasuda*, ¶ [0017].
is substantially non-transparent in a second wavelength range of the excitation light, and	"[A] stimulating light cut filter which is disposed in the optical path of the stimulated emission between the photodetector and the radiation image convertor panel to transmit the stimulated emission and to cut the stimulating light ..." *Yasuda*, ¶ [0016].
wherein the filter device is substantially non-transparent in at least a third wavelength range that is located at longer wavelengths than the second wavelength range of the excitation light.	"a longer wavelength light cut filter which transmits the stimulated emission and attenuates the intensity of light components longer in wavelength than the stimulating light is provided in the optical path of the stimulated emission between the photodetector and the radiation image convertor panel." *Yasuda*, ¶ [0017].

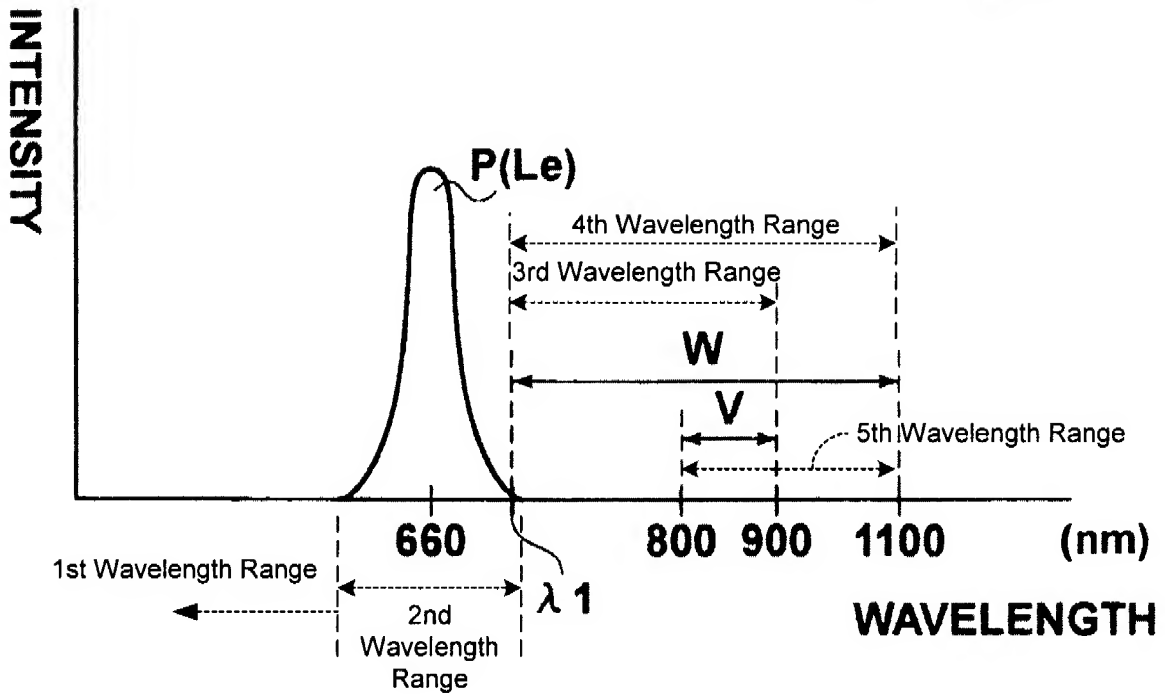
Applicant's Claim 20	Disclosure of Ser. No. 10/718,643
20. Device according to claim 19,	See discussion of base claim
wherein the filter device comprises at least two filter elements,	The stimulating light cut filter 33 and the longer wavelength light cut filter 40. *Yasuda*, ¶ [0040]; Fig. 2.
wherein at least a first one of the filter elements is substantially transparent in the first wavelength range of the emission light and	Stimulated emission emitted from the radiation image converter panel upon exposure to the red stimulating light is detected by a photomultiplier through a stimulating light cut filter which transmits the stimulated emission and cuts the red stimulating light. *Yasuda*, ¶ [0005].
is substantially non-transparent in the second wavelength range of the excitation light, and	A stimulating light cut filter which transmits the stimulated emission and cuts the red stimulating light. *Yasuda*, ¶ [0005].
wherein at least a second one of the filter elements is substantially transparent in the first wavelength range of the emission light and	The longer wavelength light cut filter transmits the stimulated emission at a transmissivity of not lower than 70%. *Yasuda*, ¶ [0024].
is substantially non-transparent in the third wavelength range, which is located at longer wavelengths than the second wavelength range of the excitation light.	The longer wavelength light cut filter attenuates the intensity of the light components in the range of not shorter than 800 nm and not longer than 900 nm in wavelength to preferably not higher than 0.01 and more preferably not higher than 0.001. *Yasuda*, ¶ [0024].
Applicant's Claim 21	**Disclosure of Ser. No. 10/718,643**
21. Device according to claim 20, wherein at least one of the filter elements includes	See discussion of base claim
a second reflection layer that is substantially non-transparent for light in a fifth wavelength range, which is located at longer wavelengths than the second wavelength range and	Use of reflective layer. *Gebele*, column 2, line 63-column 3, line 2 Obvious to modify wavelength ranges as a results effective variable. *Ishikawa*, Fig. 5, curve c defined between 750 - 1000 nm.
which partially overlaps with the third wavelength range.	*Ishikawa*, Fig. 5, 750 - 1000 nm of curve c overlaps with curve b, defined at greater than

	about 900 nm. See also *Yasuda*, annotated Fig. 3, included below.
Applicant's Claim 22	**Disclosure of Ser. No. 10/718,643**
22. Device according to claims 21, wherein at least one of the filter elements includes	See discussion of base claim
a first reflection layer that is substantially non-transparent for light in a fourth wavelength range, which is located at longer wavelengths than the second wavelength range, and	A reflective layer and an absorption filter in the optical path. *Gebele*, col. 2, ll. 57-60. Reflective layers may be designed for different wavelengths to be reflected. *Id*, ll. 37-38. Obvious to modify wavelength ranges as a results effective variable. *Ishikawa*, Fig. 5, curve c defined between 700 to 800 nm. See also *Yasuda*, annotated Fig. 3, included below.
wherein the fifth wavelength range partially overlaps with the fourth wavelength range.	Obvious to modify wavelength ranges as a results effective variable. *Ishikawa*, Fig. 5, range 700-800 nm overlaps 750 - 1000 nm of curve c. See also *Yasuda*, annotated Fig. 3, included below.
Applicant's Claim 23	**Disclosure of Ser. No. 10/718,643**
23. Device according to claim 19,	See discussion of base claim.
wherein at least one of the filter elements includes a first reflection layer	A reflective layer and an absorption filter in the optical path. *Gebele*, col. 2, ll. 57-60.
that is substantially non-transparent for light in a fourth wavelength range, which is located at longer wavelengths than the second wavelength range.	Reflective layers may be designed for different wavelengths to be reflected. *Id*, ll. 37-38. Filter characteristic substantially nontransparent in a wavelength range located at a longer wavelength range than a second wavelength range. *Ishikawa*, Fig. 5, curve b. Obvious to modify wavelength ranges as a results effective variable. *Ishikawa*, Fig. 5, range 700-800 nm. See also *Yasuda*, annotated Fig. 3, included below.
Applicant's Claim 24	**Disclosure of Ser. No. 10/718,643**
24. Device according to claim 23,	See discussion of base claim
wherein the fourth wavelength range partially	Obvious to modify wavelength ranges as a results effective variable. *Ishikawa*, Fig. 5,

overlaps with the second wavelength range.	range 700-800 nm overlaps 620 to about 710 nm. See also *Yasuda*, annotated Fig. 3, included below.
Applicant's Claim 25	**Disclosure of Ser. No. 10/718,643**
25. Device according to claim 19, wherein the third wavelength range overlaps with the second wavelength range.	See discussion of base claim Obvious to modify wavelength ranges. *Yasuda*, annotated Fig. 3, included below, in view of *In re Aller.* *Ishikawa* Fig. 5, in view of Aller.
Applicant's Claim 26	**Disclosure of Ser. No. 10/718,643**
26. Device according to claim 19, wherein the filter device at wavelengths in the first wavelength range exhibits a degree of transmission (T) that is greater than 0.1.	See discussion of base claim The longer wavelength light cut filter transmits the stimulated emission at a transmissivity of not lower than 70%. *Yasuda*, ¶ [0024]. *Ishikawa*, col. 4, lines 64-67, the transmission at 400 nm must inherently be above 0.1 for the Ishikawa device to operate for its intended purpose.
Applicant's Claim 27	**Disclosure of Ser. No. 10/718,643**
27. Device according to claim 19, wherein the filter device at wavelengths in at least one of the second wavelength range and the third wavelength range exhibits a degree of transmission (T) that is less than 10^{-3}.	See discussion of base claim The longer wavelength light cut filter 40 may attenuate either a part or the whole of the light components in the wavelength range W. The longer wavelength light cut filter attenuates the intensity of the light components in the range of not shorter than 800 nm and not longer than 900 nm in wavelength to preferably not higher than 0.01 and more preferably not higher than 0.001. *Yasuda*, ¶ [0024]; annotated Fig. 3, included below. *Ishikawa* in view of obvious modifications of known results-effective variables such as wavelength suppression of unwanted light emission. *In re Aller*
Applicant's Claim 28	**Disclosure of Ser. No. 10/718,643**
28. Device according to claim 19,	See discussion of base claim

wherein the third wavelength range borders on the second wavelength range.	*Yasuda*, annotated Fig. 3, included below. *Ishikawa* in view of obvious modifications of known results-effective variables such as wavelength suppression of unwanted light emission. *In re Aller*
Applicant's Claim 29	**Disclosure of Ser. No. 10/718,643**
29. Device according to claim 19, wherein the filter device at wavelengths in the first wavelength range exhibits a degree of transmission (T) that is greater than 0.7.	See discussion of base claim It is preferred that the longer wavelength light cut filter transmits the stimulated emission at a transmission of not lower than 70%. *Yasuda*, ¶ [0024]. *Ishikawa* in view of obvious modifications of known results-effective variables such as wavelength transmission. *In re Aller*
Applicant's Claim 30	**Disclosure of Ser. No. 10/718,643**
30. Device according to claim 19, wherein the filter device at wavelengths in at least one of the second wavelength range and the third wavelength range exhibits a degree of transmission (T) that is less than 10^{-4}.	See discussion of base claim Obvious to modify wavelength ranges. *Yasuda*, ¶¶ [0005]&[0024]. Obvious to modify wavelength ranges. *Ishikawa*, Fig. 5, curves a & b. Case law regarding obvious modifications of known results-effective variables such as wavelength suppression of unwanted light. *In re Aller*

FIG.3



Yasuda Annotated Fig. 3

VI. Statement Pursuant to 37 C.F.R. §41.202(a)(6)

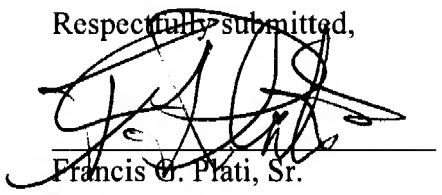
The present application claims priority from Japanese Patent Application No. 340972/2002, filed on November 25, 2002, in Japan, a WTO member country. Applicant is entitled at least to benefit of the filing date of Japanese Patent Application No. 340972/2002 as a constructive reduction to practice of the subject matter of the proposed count.

Under 37 C.F.R. §41.201, "*Constructive reduction to practice* means a described and enabled anticipation under 35 U.S.C. 102(g)(2) in a patent application of the subject matter of a count." In the interference, Mr. Yasuda is entitled to priority of the filing date of Japanese Patent Application No. 340972/2002, because this foreign application discloses embodiments which anticipate the subject matter of the proposed count.

VII. Conclusion

Applicant requests that an interference be declared between the present application and Lind *et al.* U.S. Patent No. 7,071,484.

Respectfully submitted,



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